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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,564	07/27/2005	Tomohiro Azuma	18524	8391

7590 01/24/2007  
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EXAMINER
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NGUYEN, NGA X

ART UNIT	PAPER NUMBER
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3662

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/518,564

Applicant(s)

AZUMA, TOMOHIRO

Examiner

NGA X. NGUYEN

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/20/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipating by Azuma (US2004/0070533).

With regard to claim 1, 6 & 12-13, Azuma discloses:

- A calibration signal generator (see page 4, paragraph 57-58 & page 5, paragraph 73).
- A distributor (Electric power level varying circuit) distributes calibration signals to the multiplexing circuits (see page 4, paragraph 57-58 & page 5, paragraph 73).
- A plurality of multiplexing, each of which multiplexes each calibration signal (page 4, paragraph 61).
- A plurality SIR calculating (Azuma teaches that the SIR detecting portion estimates SIR value of branches which meets the claim of said a plurality of SIR calculating) extracts and demodulates each calibration signal form an output signal of the multiplexing and further compares the SIR value with a threshold (reference) value (see page 5, paragraph 64-65).
- A calibration signal-processing portion is for storing a reference demodulation result and detecting a calibration amount of amplitude/phase information (see page 5, paragraph 65).

- A signal-processing portion for correcting a user signal based on the calibration amount (see page 5, paragraph 66).

With regard to claim 2 & 9, Azuma discloses an electric power of the calibration signal is a fixed electric power sufficiently smaller than a noise electric power in a receiver of a radio base station installation (see page 5-6, paragraph 72-74).

With regard to claim 3, Azuma discloses that a calibration period for updating a calibration amount in each reception branch differs from once another in every reception branches (see page 5, paragraph 63).

With regard to claim 4, Azuma discloses that the calibration amount calculating calculates a calibration amount with respect to only a reception branch (see page 6, paragraph 77-78).

With regard to claim 5 & 10, Azuma discloses the SIR value does not reach a SIR threshold value, a user signal in a reception branch indicates the failure (see page 6, paragraph 80).

With regard to claim 7, Azuma teaches controlling a transmission electric power of a calibration signal based on a control signal in response to a SIR value (see page 5, paragraph 64 & 69).

With regard to claim 8, Azuma teaches supplying of the calibration signals based on the reception branch information from the SIR calculating (see page 5, paragraph 64 & 67).

With regard to claim 11 & 14, Azuma teaches that a BER is used in place of the SIR value (see page 6, paragraph 82 & 86).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGA X. NGUYEN whose telephone number is 571-272-5217. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TARCZA H. THOMAS can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGA X NGUYEN  
Examiner  
Art Unit 3662

NXN



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